Application No. 10/712,155
Attorney Docket No. 09700.0034

SAP Reference No.: 2003P00471 US

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

- (Currently Amended) A method <u>for managing a client server network, said</u> <u>method</u> comprising:
  - in a client server network, maintaining systems having of grid managers having in a grid computing environment, wherein said grid managers have hierarchical relations [[,]];
  - storing, in each of the systems, the relations of each grid manager stored in each of the systems; and
  - dynamically reconfiguring resource allocations in the grid computing
    environment to maintain a predetermined resource allocation level.
- 2. (Original) The method of claim 1 in which each of the relations are classified as superior or inferior.
- 3. (Currently Amended) A system comprising:
  - a network of computer systems, each of the computer systems including a grid manager management engine, each of the grid managers having hierarchical relations with other grid managers, the relations of each grid manager being stored in each of the systems; and
  - a dynamic resource allocator for reconfiguring computing resources in the network of computer systems to maintain a predeterminined resource allocation level.

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- (Currently Amended) The method system of claim 3 in which each of the relations are classified as superior or inferior.
- 5. (Currently Amended) A method comprising:
  - in a network, starting, in a network, an execution of a first service on a first computer, the first service handling at least locating, reserving, allocating, monitoring, and deallocating one or more computational resources for one or more applications using the network;
  - reading, by the first service, a file to inform the first service of a relation with a second service, wherein the first service has a inferior relation with the second service, the inferior relation meaning that the second service can send a query for available computer resources to the first service;
  - establishing a first communication channel from the first service to the second service; and
  - accepting an opening of a second communication channel from the second service to the first service.
- 6. (Original) The method of claim 5 further comprising:
  - receiving a message to cancel the first service's inferior relation with the second service;
  - closing the first and second communication channels;
  - receiving a message to generate a inferior relation from the first service to a third service residing in a third computer;
  - establishing a third communication channel from the second service to the third service; and

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accepting an opening of a fourth communication channel from the third service to the first service.

- 7. (Original) The method of claim 5 wherein establishing a first communication channel further comprises determining if the second service responds to determining and if not, establishing a communication channel to the second service after a predetermined time period.
- 8. (Currently Amended) A method comprising:
  - in a network, starting, in a network, an execution of a first service residing in a first computer, the first service handling at least locating, allocating, monitoring, and deallocating one or more computational resources for one or more applications using the network;

starting an execution of a second service residing in a second computer;

- reading, by the second service, a file to inform the second service of a relation with the first service, wherein the second service has a inferior relation with the first service, wherein the inferior relation indicates that the first service can send a query for available computer resources to the second service;
- establishing a first communication channel from the second service to the first service; and
- establishing a second communication channel from the first service to the second service.
- 9. (Original) The method of claim 8 further comprising:
  - receiving, by the second service, a message to cancel the second service's relation with the first service;

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closing the first communication channel;

failing to respond to the second communication channel;

receiving a message to create a inferior relation from the second service to a third service;

establishing a third communication channel from the second service to the third service; and

establishing a fourth communication channel from the second service to the third service.

## 10. (Currently Amended) A system comprising:

- two or more computers each configured to run a service, the service handling at least locating, allocating, monitoring, and deallocating one or more computational resources for one or more applications;
- a network of the services, the network configured such that a first service from the services has a superiorrelation superior relation with a second service from the services and the second service has an inferior relation with the first service, wherein the first service is configured to check the status of the second service in the network by waiting for a response to a query from the first service to the second service.
- 11. (Original) The system of claim 10 wherein the relation comprises a first communication channel from the first service to the second service and a second communication channel from the second service to the first service.

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12. (Original) The system of claim 10 wherein the first service is further configured to locate the one or more computational resources for the one or more applications by sending a query for available computational resources to the second service.

13. (Original) The system of claim 10 wherein the second service is further configured to remove its inferior relation with the first service and create a new superior relation with a third service.